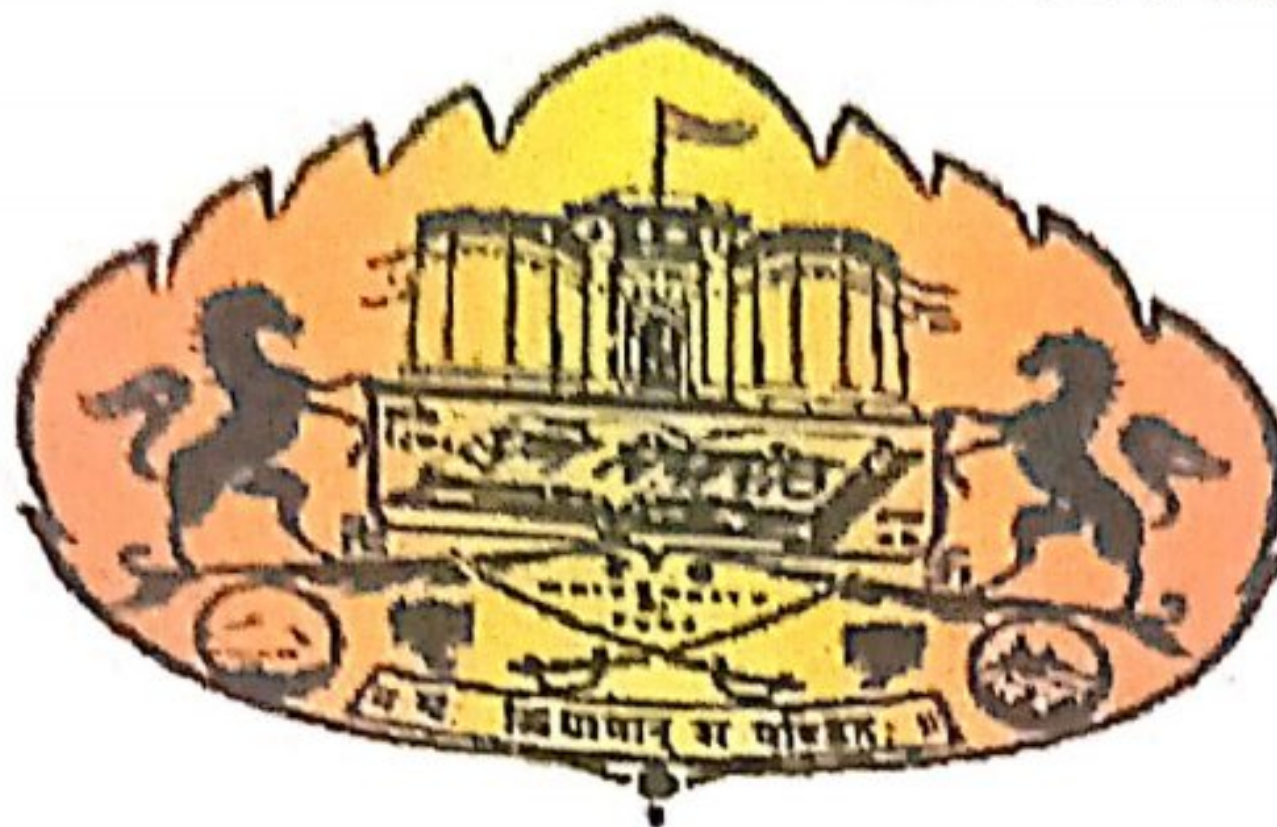


**GREEN SYNTHESIS AND CHARACTERIZATION OF COBALT OXIDE ( $\text{CO}_3\text{O}_4$ ).**

**RESEARCH PROJECT SUBMITTED TO  
SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE**



**FOR THE DEGREE OF  
MASTER OF SCIENCE**

**IN**

**ORGANIC CHEMISTRY**

**UNDER THE FACULTY OF SCIENCE**

**BY**

**MR. AMIT BHAUSAHEB MURKUTE**

**UNDER THE GUIDANCE OF**

**MISS. GAYTRI HANDGE MDM**

**DEPARTMENT OF CHEMISTRY**

**G.M.D. ARTS, B.W. COMMERCE AND SCIENCE COLLEGE, SINNAR  
422103**

**OCT/NOV 2024-2025**





Maratha Vidya Prasarak Samaj's

G.M.D. ARTS, B.W. COMMERCE AND SCIENCE COLLEGE,  
SINNAR, DIST- NASHIK

## DEPARTMENT OF CHEMISTRY

This is to certify that the work incorporated in the project entitled

**Topic name:** Green Synthesis and Characterization of Cobalt oxide ( $\text{Co}_3\text{O}_4$ ).

Was satisfactorily carried out by **Mr. Amit Bhausaheb Murkute** of **M.Sc. Organic Chemistry**. He has completed this project under my supervision and guidance during **Academic Year 2024 -2025**. This project work submitted by his original and the scientific information obtain from other sources have been acknowledged.

**Miss.Handge Gayatri mdm**

(Project Guide)






Maratha Vidya Prasarak Samaj's  
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DEPARTMENT OF CHEMISTRY


## CERTIFICATE

This is to certify that PG dissertation entitled **Green Synthesis and Characterization of Cobalt oxide ( $\text{Co}_3\text{O}_4$ )**. submitted by **Mr. Amit Bhausahb Murkute** and it was carried out by the candidate under the supervision of **Miss. Gayatri Handge Mdm.** He has successfully completed the project work in Organic Chemistry (**CHO-607**) during the Sem-III of academic year 2024-2025.

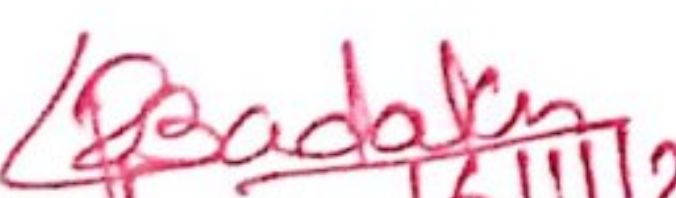
Date:

Place: Sinnar


  
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Internal Examiner

  
External Examiner

  
RV Rote  
16/11/24  
External Examiner



## DECLARATION

I hereby declare that the presented Research Project on "**Green Synthesis and Characterization of Cobalt oxide ( $\text{Co}_3\text{O}_4$ )**." is uniquely prepared by me at G.M.D. Arts, B.W. Commerce And Science College Sinnar under the guidance of Miss. Gayatri Hnadge.Mdm

Place: Sinnar  
Date

Sign - \_\_\_\_\_  
Name-Amit Bhausahab Murkute



## ACKNOWLEDEMENT

- I would like to thank M.V.P. Samaj's G.M.D.Arts B.W.Commerce and Science College Sinnar for providing me the necessary resources, infrastructural , and facilities to carry out this project.
- I would like to thank our College Principal **Dr. P. V. Rasal** for constant support and Providing infrastructural facility for this project work.
- I would like to thank, **HOD Prof. Dr .M .R. Gaware** for his constructive help during project .
- I would like to thank, **Miss.Gayatri Handge Mdm** (Project Guide), for their constant Encouragement, insightful feedback, and expert guidance that helped me to navigate through the various challenges of this project.
- I would like to thank all the faculty members of the Department of Chemistry, for Imparting me with the theoretical and practical knowledge necessary to complete this project.
- I would like to thank my classmate, for their feedback suggestion and stimulating discussions that enriched my understanding of the subject matter.

Sign-

Name- Murkute Amit Bhausaheb